

# **EXAMINATION SUMMARY**

NTSB ACCIDENT NUMBER: CEN21FA277

AIRCRAFT REGISTRATION/AIRCRAFT TYPE: N62WR, Cirrus SR20 ACCIDENT LOCATION: Conway, Arkansas

# CEN21FA277/Cirrus SR20/N62WR

### WRECKAGE AND IMPACT INFORMATION

## Wreckage Location

- The debris field was aligned on a 295° MH
- Altitude was 282 ft MSL.
- Coordinates N 35.026957, W 92.547327
- Wreckage was located on airport property in grass about 12" tall
- Debris field about 110' long as measured on scene from tip of rocket to fuselage
- Airplane came to rest facing 62 degrees and was on 45 degree angle
- Debris field about 50ft wide

## **Right Wing**

- Exhibited leading edge crushing the length of the wing
- Wing began separating from the fuselage at the aft root with the fairing remaining attached to the wing
- Top of the wing skin separated along the trailing edge bond line laterally from the wingtip inboard to the outboard edge of the flap
- Further separation diagonally from the trailing edge toward the leading edge, stopping by the fuel cap
- Bottom skin separated at the inboard side of the inspection panel leading edge to trailing edge
- Fuel tank breached, fuel cap remained secured
- Fiberglass tip fractured.
- Paint remnants located within the initial impact area
- Dead grass present from the area of the paint chip to the final resting place, consistent with exposure to fuel

# **Left Wing**

- Leading edge crushing along the length of the wing
- Top and bottom was relatively free of impact damage
- Fuel cap remained secured in place
- Pitot cover remained secured in place

# **Ailerons and Flaps**

- Right aileron actuator separated from the aileron actuation pulley
- Right aileron relatively free of impact damage
- Right flap at multiple small trailing edge deformations
- Left aileron and flap remained attached at all attach points and were relatively free of impact damage
- Flap actuator extended about 4", consistent with flaps retracted
- Aileron continuity from rear floor of cockpit to each wing

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#### Rudder and Horizontal Stabilizer

- Vertical stabilizer, rudder, horizontal stabilizer and right elevator remained relatively free of damage
- Left elevator exhibited upward bending near the outboard attach point.
- Elevator and rudder continuity established from aft floor to FS306 bulkhead bell cranks

# **Fuselage**

- Fuselage structure from the firewall to the back of the cabin was destroyed
- Aft fuselage structure cracked near the FS 222 & FS289 bulkheads

## **Engine**

- Continental IO-360ES, examined on site
- Top spark plugs 2, 3, 4, 5 and 6 were removed and found to be unremarkable
- Bottom spark plugs 2, 4 and 6 were removed and found to be unremarkable
- Damage and engine disposition precluded removal of additional plugs
- The number 6 cylinder rocker covers were removed with no findings found
- Oil sump was destroyed. Visual inspection inside revealed nothing remarkable

# Prop

- Separated from the engine with fractured shaft. The spinner and all three blades were buried under dirt
- Prop was removed and blades were arbitrarily numbered 1, 2 and 3
- All blades displayed aft bending
- Camber side of each blade contained chordwise striations consistent with grass and indicative of rotation
- The two ground scars from the prop blades contained white paint transfer from the prop to the dirt.

### **Instrument Panel**

- PFD was ejected from the instrument panel and found within the debris field
- Retained for shipment to NTSB lab
- MFD remained secured in place; removed for inspection with data card retained for download
- Auto pilot unit remained secured in place; removed for NVM download
- HOBBS: 1571.1
- Fuel selector in right tank position

### CAPS

- Parachute found outside of airplane
- Rocket expelled, but remained attached
- 2 dimples found inside CAPS compartment from impact with attach bolts, consistent with impact deployment.